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NOTIFICATION DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>10 September 2009</u>.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1,2,5,7,9,10,12,14-16,18 and 20-27</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1, 2, 5, 7, 9, 10, 12, 14-16, 18 and 20-27</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail. Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

<center>**DETAILED ACTION**</center>

<center>*Response to Amendment*</center>

Amendments and response received September 10, 2009 have been entered. Claims 1, 2,

5, 7, 9, 10, 12, 14-16, 18 and 20-27 are currently pending in this application. Claims 1, 5, 9, 12

and 15 have been amended and claim 4 canceled. Claims 25-27 have been newly added.

Amendments and response are addressed hereinbelow.

<center>*Claim Rejections - 35 USC § 103*</center>

1.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

2.   Claims 1, 2, 5, 7, 9, 10, 12, 14 and 22-24 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Yuuichi Bannai et al (US 5267052).

Regarding claim 1, Bannai et al discloses an image processing apparatus (Fig. 1 image communication terminal) which acquires coded data of a plurality of images from an external recording medium (Col. 5 lines 54-57), wherein the coded data is hierarchically encoded data of the plurality of images (Col. 5 lines 57-64; See also Fig. 2), the apparatus comprising:

an input interface which receives signals from the external recording medium (Fig. 1 numeral 5 communication control unit must have an input interface to connect to the communication network 12);

an image input controller (Fig. 1 numeral 5 communication control) which acquires the coded data by said input interface first only at a first level of hierarchical encoding from the external recording medium over the plurality of images (Col. 17 lines 67-68 wherein the method of acquiring data only at a first level is disclosed and easily extendible to the device utilizing transmission/reception means for moving image data);

a decoder (Fig. 1 numeral 9) which decodes the coded data acquired by said image input controller (Col. 6 lines 23-27);

a storage device (Fig. 1 numeral 10) which stores data decoded by said decoder (Col. 6 lines 24-30);

an index maker (Fig. 4 and Col. 6 lines 23-32 suggests there exists an "index maker") which makes an index image of the plurality of images based on the data at the first level of hierarchical encoding on the plurality of images (Col. 6 lines 23-32); and

a print engine which prints the index image received from said index maker (Col. 8 lines 23-32 wherein the index images are printed);

wherein the image input controller receives data at a second level of hierarchical

encoding for each of the plurality of images after data acquisition of the data at the first level of

hierarchical encoding is completed (Col. 17 line 67 through Col. 8 line 4 wherein icon image

data are transmitted first to be output before/during reception/acquisition of the original image

data) and wherein the first level includes a lower resolution than the second level (Col. 2 lines

65-66 wherein the lowest resolution images are adopted as icon images).

Bannai fails to explicitly disclose the input controller receives data at a second level of

hierarchical encoding for each of the plurality of images during outputting of the index image.

Bannai teaches receiving the icon images first because they "have a very small amount of

data" and "it is possible to promptly receive the images and display the images on the display

unit" (at Col. 18 lines 1-4). Bannai et al goes on to further teach the receiving terminal may "stop

the transmission from the transmitting terminal before receiving the original". Bannai further

teaches the "icon images may be output in the form of a summary of received or transmitted

images" (at Col. 17 lines 41-47). Simply substituting the "displaying of the icon images" for

"printing the icon images to a recording medium" as taught by Bannai would have constituted

the mere arrangement of old elements with each performing the same function it had been known

to perform, the substitution yielding no more than one would expect from such an arrangment.

The above teachings indicate Bannai is fully capable of receiving the icon images and

subsequently printing the icon images instead of displaying the icon images, while receiving the

original images. One of ordinary skill could have easily terminated the transmission of an

original by referencing the printed icon images. Therefore, although Bannai does not explicitly

recite "receiving data at a second level of hierarchical encoding for each of the plurality of

images during outputting of the index image", it would have been obvious for a person of

ordinary skill in the art to try the claimed method because it is well within the scope of the cited

art. Furthermore, prior art is not limited just to the references being applied, but includes the

understanding of one of ordinary skill in the art. The prior art reference (or references when

combined) need not teach or suggest all the claim limitations, however, Office personnel must

explain why the difference(s) between the prior art and the claimed invention would have been

obvious to one of ordinary skill in the art. The "mere existence of differences between the prior

art and an invention does not establish the invention's nonobviousness." Dann v. Johnston, 425

U.S. 219, 230, 189 USPQ 257, 261 (1976). The gap between the prior art and the claimed

invention may not be "so great as to render the [claim] nonobvious to one reasonably skilled in

the art." Id. In determining obviousness, neither the particular motivation to make the claimed

invention nor the problem the inventor is solving controls. The proper analysis is whether the

claimed invention would have been obvious to one of ordinary skill in the art after consideration

of all the facts. See 35 U.S.C. 103(a). Factors other than the disclosures of the cited prior art may

provide a basis for concluding that it would have been obvious to one of ordinary skill in the art

to bridge the gap. Examiner feels the gap is bridged because every structural limitation is

believed to be taught by at least the passages of Bannai cited above and the structure of the

apparatus taught by Bannai is fully capable of performing each and every one of the functional

limitations recited in claim 1 as indicated above.

Regarding claim 2, Bannai et al discloses the image processing apparatus according to claim 1, wherein the first level of hierarchical encoding is the lowest level (Col. 2 lines 65-66 wherein the lowest resolution images are adopted as icon images).

Regarding claim 5, Bannai et al discloses the image processing apparatus according to claim 1, further comprising:

an operational device (Fig. 1 numeral 2 keyboard) which instructs to make an index to said index maker (Col. 5 lines 42-47); and

a controller (Fig. 1 numeral 1 CPU) which allows to activate said index maker when instructed by said operational device ("In FIG. 1, a central processing unit (CPU) 1 controls the operation of the entire image communication terminal. A keyboard 2 inputs various kinds of operation commands and character code data to the CPU 1" at Col. 1 lines 7-11) after data acquisition of the data at the first level of hierarchical encoding is completed (Col. 5 lines 60-64 wherein the data is stored in memory 7 after the completion of reception. Memory 7 holds encoded image data as described in Col. 6 lines 23-32).

Regarding claim 7, discloses the image processing apparatus according to claim 5, further comprising a display device which displays a state of data acquisition of the coded data divided by the levels of hierarchical encoding.

Regarding claim 9, Bannai discloses an image processing method for acquiring coded data of a plurality of images from an external recording medium, wherein the coded data is

hierarchically encoded data of the plurality of images (see rejection of claim 1, image processing apparatus carrying out the method), the method comprising:

acquiring the coded data first only at a first level of hierarchical encoding from the external recording medium over the plurality of images (see rejection of claim 1);

decoding the coded data acquired from the external recording medium (see rejection of claim 1);

making an index image of the plurality of images based on the data at the first level of hierarchical encoding on the plurality of images (see rejection of claim 1); and

acquiring data at a second level of hierarchical encoding for each of the plurality of images after data acquisition of the data at the first level of hierarchical encoding is completed and during outputting of the index image, wherein the first level includes a lower resolution than the second level (see rejection of claim 1).

Regarding claim 10, Bannai et al discloses the image processing method according to claim 9, wherein the first level of hierarchical encoding is the lowest level (see rejection of claim 2).

Regarding claim 12, Bannai et al discloses the image processing method according to claim 9, further comprising:

receiving an instruction by a user to make an index (see rejection of claim 5); and

activating the making of the index image when instructed by the user after data

acquisition of the data at the first level of hierarchical encoding is completed (see rejection of

claim 5).

Regarding claim 14, Bannai et al discloses the image processing method according to

claim 12, further comprising displaying a state of data acquisition of the coded data divided by

the levels of hierarchical encoding (see rejection of claim 7).

Regarding claim 22, Bannai et al discloses the image processing apparatus according to

claim 1, wherein the coded data is compressed data (Suggested at Col. 6 lines 61-63; wherein the

encoder performs entropy encoding using arithmetic encoding which is a form of lossless

compression).

Regarding claim 23, Bannai et al discloses the image processing method according to

claim 9, wherein the coded data is compressed data (Suggested at Col. 6 lines 61-63; wherein the

encoder performs entropy encoding using arithmetic encoding which is a form of lossless

compression).

Regarding claim 24, Bannai et al discloses the computer readable recording medium

according to claim 15, wherein the coded data is compressed data (Suggested at Col. 6 lines 61-

63; wherein the encoder performs entropy encoding using arithmetic encoding which is a form of

lossless compression).

3.   Claims 15, 16, 18, 20, 21 and 27 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Bannai et al in view of Hiroshi Kajiwara (US 6985630 B2).

         Regarding claim 15, Bannai et al discloses the method as rejected in claim 9 above.

         Bannai et al fails to explicitly disclose a computer readable recording medium which

records an image processing program for implementing the method of claim 9 above.

         Kajiwara, in the same field of endeavor, teaches the use of a computer readable recording

medium which records an image processing program for carrying out computer implemented

methods in an image processing apparatus (Col. 18 lines 15-21).

         It would have been obvious to one of ordinary skill in the art at the time the invention

was made for the method performed by the image processing apparatus as disclosed by Bannai et

al to utilize a computer readable recording medium which records an image processing program

so a computer or an apparatus may read and execute the program code stored to realize the

functionality of the hardware.

         Regarding claim 16, Bannai discloses the computer readable recording medium

according to claim 15 (see rejection of claim 15), wherein the first level of hierarchical encoding

is the lowest level (see rejection of claim 10).

Regarding claim 18, Bannai discloses the computer readable recording medium according to claim 15 (see rejection of claim 15 for computer readable recording medium), the program further comprising:

receiving an instruction by a user to make an index (see rejection of claim 12); and activating the making of the index image when instructed by the user after data acquisition of the data at the first level of hierarchical encoding is completed (see rejection of claim 5).

Regarding claim 20, Bannai et al discloses the computer readable recording medium according to claim 18 (see rejection of claim 15 for computer readable recording medium), the program further comprising displaying that an image can be primed after data at the second level of hierarchical encoding is acquired for the image (Col. 18 lines 25-30 wherein an icon image is selected and the original image is displayed and may be primed in accordance with an indication from a keyboard), and of outputting the image based on the data acquired on the image when instructed by a user (Col. 18 lines 25-27 wherein an icon is selected and the original image is displayed).

Regarding claim 21, Bannai et al discloses the computer readable recording medium according to claim 18, the program further comprising displaying a state of data acquisition of the coded data divided by the levels of hierarchical encoding (see rejection of claim 14).

4.   Claims 25 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bannai

et al as applied to claims 1 and 9, respectively, and further in view of Kenneth A. Parulski et al

(US 7027172 B1).

Regarding claim 25, Bannai discloses the image processing apparatus according to claim 1.

Bannai discloses acquisition of the data at the first level of hierarchical encoding (see rejection of claim 1 above). However, Bannai fails to explicitly disclose a user interface which, after data acquisition of the data at the first level of hierarchical encoding is completed, notifies a user that an index image is possible.

Parulski et al, in the same field of endeavor of transmitting image data from an external storage to a printer (Abstract), teaches notifying a user that an index image is possible (Col. 14 lines 48-50 wherein a user may be notified that all images were successfully uploading, indicating a print, with all images which have been transmitted, is possible).

It would have been obvious to one of ordinary skill in the art at the time the invention was made for the invention as disclosed by Bannai wherein image data is acquired at a first level of hierarchical encoding to utilize the teachings of Parulski et al wherein a notification is sent to a user when all images have been successfully downloaded which indicates an index print is possible to allow the user to quickly and easily select a set of the images to be printed locally.

Regarding claim 26, Bannai discloses the image processing method according to claim 9, further comprising, after data acquisition of the data at the first level of hierarchical encoding is completed, notifying a user that an index image is possible (see rejection of claim 25).

5.   Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bannai et al in

view of Kajiwara as applied to claim 15 above, and further in view of Kenneth A. Parulski et al

(US 7027172 B1).

        Regarding claim 27, Bannai discloses the computer readable recording medium

according to claim 15, the program further comprising, after data acquisition of the data at the

first level of hierarchical encoding is completed, notifying a user that an index image is possible

(see rejection of claim 25).

                                    Response to Arguments

6.   Applicant's arguments filed September 10, 2009 have been fully considered but they are

not persuasive.

Applicant's remarks: Bannai clearly does not disclose that the image input controller receives

data at a second level of hierarchical encoding for each of the plurality of images after data

acquisition of the data at the first level of hierarchical encoding is completed and during

outputting of the index image.

Examiner's response: Examiner disagrees. Bannai suggests receiving data a second level of

hierarchical encoding for each of the plurality of images after data acquisition of the data at the

first level of hierarchical encoding is completed as indicated in the rejection of claim 1 above.

The invention as disclosed by Bannai is fully capable of outputting an index print of the

icon/thumbnail images while acquiring the images at a second level of hierarchical encoding as

indicated in the rejection of claim 1 above. Since the images at the first level of hierarchical

encoding may be acquired first and held in storage, there is nothing which prevents the

outputting of the index print while acquiring images at the second level of hierarchical encoding.

(See rejection of claim 1 above)

Conclusion

7.   Applicant's amendment necessitated the new ground(s) of rejection presented in this

Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the date of this

final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAMARES WASHINGTON whose telephone number is (571) 270-1585. The examiner can normally be reached on Monday thru Friday: 7:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, King Poon can be reached on (571) 272-7440. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/King Y. Poon/
Supervisory Patent Examiner, Art Unit 2625

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November 24, 2009